

1. Leaves entire or obscurely undulate-serrate; sepals strongly imbricate; filaments glabrous. (Northern Brazil and northward).....2
2. Ring of glands surrounding stamens; anthers glabrous or slightly pubescent at apex.....3
3. Anthers at two levels, one set of about 5 above the others; rudimentary ovary large.....4
4. Pubescence on branchlets of short spreading grey hairs; stipules small, inconspicuous.....D. Spruceana Muell. Arg. in DC.
4. Pubescence of appressed brownish bristles; stipules foliaceous, conspicuous.....D. Maguireana Monach.
3. Anthers at one level; rudimentary ovary of three small lanceolate scales.....D. Krukoffii Monach.
2. Ring of glands lacking, the central disk marked; anthers at one level; rudimentary ovary small or lacking.....5
5. Flowers 7--many in each fascicle; stamens 8--10; anthers minutely hairy. (Brazil).....D. amazonica Steyererm.
5. Flowers 1--3 in each fascicle; stamens 4--8; anthers glabrous. (Guianas).....D. variabilis Vitt.

It is quite likely that a careful examination of the South American specimens of Drypetes will uncover additional species. Of greater importance is to know the variation-habit in the group. For example, characters for a clear demarcation of D. amazonica and D. variabilis are needed. There is doubt about the proper position of Krukoff 6219 and 6418, from the Rio Madeira, distributed as D. variabilis but seeming closer to D. amazonica. In these specimens the leaves are much smaller and the inflorescences more sparsely flowered than in typical D. amazonica. Krukoff 5624, from Rio Purus, differs from typical D. amazonica in its very long pedicels, in the central disk being glabrous, and in the number of anthers being eleven instead of eight. Klug 3869 and 3880, from San Martín, Peru, named as a new species ined. by Standley, belong with the two above-mentioned species but their precise position is dubious.

NOTES ON NEW AND NOTEWORTHY PLANTS. VI

Harold N. Moldenke

ERIOCAULON REGNELLII Moldenke, sp. nov.

Herba nana; caulis perabbreviatis; foliis rosulatis paucis graminoides pellucidis fenestris glabris longe attenuatis; vagina satis magna laxa glabra oblique fissae; pedunculis grac-

illimis stramineis 3-costatis glabris tortulosis; capitulis atrogriseis hemisphaericis.

Dwarf herb; stems very much abbreviated; leaves rosulate, few, very thin, grass-like, 10--18 mm. long, usually less than 1 mm. wide, pellucid, fenestrate, glabrous, long-attenuate at the apex; sheath comparatively large, equaling or slightly surpassing the leaves, 10--15 mm. long, loose, several-ribbed, glabrous, obliquely split at the apex, the blade erect, acute, the tip sometimes recurved; peduncles 1--4 or more per plant, very slender, stramineous, 3--5.5 cm. long, glabrous, 3-ribbed, slightly twisted; heads dark-gray, hemispheric, 3--5 mm. in diameter, smooth; involucrel bractlets elliptic or oblanceolate, grayish, about 2.1 mm. long, 1--1.3 mm. wide, obtuse at the apex, glabrous, easily splitting down the middle; staminate florets: sepals 3, separate, blackish, broadly elliptic or obovate, 0.8--1 mm. long, 0.4--0.5 mm. wide, rounded at the apex, glabrous or with a few short hairs at the apex on the back, not barbellate; petals 3, united into a hyaline tube about 1.3 mm. long, free at the apex; stamens 6, about 0.2 mm. long; pistillate florets: sepals 3, separate, elliptic or slightly obovate, navicular, blackish, 1.3--1.4 mm. long, 0.6--0.8 mm. wide, rounded and apiculate at the apex, glabrous except for a very few antrorse hairs near the apex on the back, not barbellate; petals 3, hyaline, erect, spatulate, separate, about 1.7 mm. long and 0.4 mm. wide, short-pilose at the apex, not barbellate, with a small black gland near the apex in the median portion; style about 0.2 mm. long, glabrous; stigmas 3, about 0.4 mm. long; ovary 3-sulcate, 3-celled, 3-ovulate.

The type of this species was collected by Anders Fredrik Regnell (no. III.1740) at Caldas, Minas Geraes, Brazil, on April 20, 1870, and is deposited in the United States National Herbarium at Washington.

JUNELLIA TRIPARTITA Moldenke, sp. nov.

Frutex; ramis ramulisque lignosis rigidis gracilibus, in statu juventute angulosis et laxo albido-pubescentibus, in statu senectute albido-puberulis et teretibus; foliis alternis sessilibus chartaceis profunde 3-partitis viridibus, lobis ellipticis vel anguste oblanceolatis argute acutis, ad basin longe attenuatis, utrinque irregulariter sparse pilosulis.

Woody shrub; branches and branchlets woody, stiff, slender, rounded when old, angular when young, loosely whitish-pubescent when young, less so or even only whitish-puberulent in age; principal internodes much abbreviated, to 6 mm. long; leaves numerous, alternate, sessile, chartaceous, uniformly bright-green on both surfaces, not blackening in drying, 3-parted practically to the base, the 3 lobes mostly equal, but sometimes the 2 lateral ones reduced, elliptic or narrowly oblanceolate, 5--12 mm. long, 1--1.5 mm. wide, mostly sharply acute

at the apex, long-attenuate at the base, irregularly and rather sparsely pilosulous on both surfaces, often with a few scattered cilia-like hairs on the margins, one-nerved; veinlet reticulation not discernible; inflorescence terminal, spicate; peduncles abbreviated, about 5 mm. long, loosely pubescent like the rachis; spikes 1.5--5 cm. long, densely flowered, the flowers imbricate; bractlets lanceolate, about 4 mm. long and 1 mm. wide, irregularly ciliate-margined, minutely pilosulous on the back, attenuate-acute at the apex; calyx tubular, about 7 mm. long, 5-ribbed, rather unequally 5-toothed, loosely pilose or short-pubescent, the teeth long-apiculate; corolla-tube 9--10 mm. long, glabrous, blackening in drying, the limb to 5 mm. wide, blackening in drying.

The type of this very remarkable species was collected by A. Ruiz Leal (no. 7966) at Las Catitas, dept. Santa Rosa, Mendoza, Argentina, on April 4, 1942, and is deposited in the Britton Herbarium at the New York Botanical Garden. Its alternate leaves and general habit indicate its relationship to J. Eche-garayi (Hieron.) Moldenke, and perhaps both these species are closely related to the genus Dipyrrena.

LANTANA ANGOLENSIS Moldenke, sp. nov.

Fruticulus; ramis ramulisque crassiusculis rigidis acute tetragonis vel 5-angulatis asperis, in statu juventute densiuscule albido-substrigosis, pilis bulbosis; foliis oppositis vel ternatis; petioliis densiuscule albido-strigosis; laminis firmis ovatis acutis serratis supra subbullatis, ad basin rotundatis vel subtruncatis, supra dense substrigoso-pubescentibus, subtus densissime albido- vel ochraceo-tomentosis.

Shrubby; branches and branchlets rather stout, stiff, acutely tetragonal or 5-angled, asperous, rather densely substrigose with whitish short hairs on the younger parts, less so in age, the hairs bulbous-based, the bulbous bases persistent on older parts of the stem; nodes not plainly annulate; principal internodes 3--7.5 cm. long; leaves decussate-opposite or ternate; petioles to about 9 mm. long, rather densely whitish-strigose; blades thick and firm, dark-green above, much lighter beneath, ovate, to about 4 cm. long and 2.5 cm. wide, acute at the apex, rounded or subtruncate at the base or varying to subcordate, uniformly serrate with rounded teeth from base to apex, subbullate above, densely substrigose-pubescent with short whitish hairs above, very densely tomentose with white or ochraceous hairs beneath; midrib deeply impressed above, very prominent beneath; secondaries slender, about 5 per side, deeply impressed above, prominent beneath; vein and veinlet reticulation very abundant and conspicuous, deeply impressed above and very prominent beneath; inflorescence axillary; spikes subcapitate in anthesis, elongating to 1 cm. after anthesis; peduncles stout, very short, about 1 cm. long, densely white-strigose; rachis

thick, densely white-strigose; flowers and fruit not seen.

The type of this species was collected by B. Fritzsche (no. 109) at Humpata, Mossamedes, Angola, in May, 1903, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

LANTANA RUGOSA var. *TOMENTOSA* Moldenke, var. nov.

Haec varietas a forma typica speciei laminis foliorum subtus densissime pubescentibus et non rugosis differt.

This variety differs from the typical form of the species in having its leaf-blades very densely pubescent beneath and not conspicuously rugose, the vein and veinlet reticulation plane or only subimpressed above and plane or only very inconspicuously prominulous beneath.

The type was collected by J. A. Wahlberg at Goda Happs-udden, Cape of Good Hope, Union of South Africa, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm. Recent investigations have shown that the name *Lantana rugosa* Thunb. is the name which will have to be used for the species hitherto almost uniformly known as *L. salvifolia* Jacq.

LANTANA RUGULOSA f. *ALBIFLORA* Moldenke, f. nov.

Haec forma a forma typica speciei corollis albis recedit.

This form differs from the typical form of the species in having white corollas.

The type was collected by Gunnar Harling (no. 1728) along the side of a river, at an altitude of 20 m., at Esmeraldas, prov. Esmeraldas, Ecuador, on August 28, 1947, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

LANTANA VIBURNOIDES var. *SCHIMPERI* Moldenke, var. nov.

Haec varietas a forma typica speciei foliis inflorescentibus oppositis vel ternatis, foliis usque ad 13 cm. longis et 4 cm. latis, et pilis crassis patento-hirsutis plerumque pustulatis differt.

This variety differs from the typical form of the species in having its leaves and inflorescences opposite or ternate, the leaves to 13 cm. long and 4 cm. wide, and the pubescence on the branchlets, petioles, leaf-blades, and peduncles coarse and spreading-hirsute, mostly pustulate-based on the branchlets and petioles and midrib beneath.

The type was collected by M. W. Schimper at Dewari, Abyssinia, on October 5, 1863, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

LIFIA AFRICANA var. *SCABERRIMA* Moldenke, var. nov.

Haec varietas a forma typica speciei laminis foliorum usque ad 10 cm. longis et 3.5 cm. latis, supra scaberrimis, pilis bulbosis, ep pilis ramorum ramulorumque pedunculorumque bract-

arumque calycisaeque bulbosae in inflorescentiae granulis resinosis interspersis differt.

This variety differs from the typical form of the species in its leaf-blades being to 10 cm. long and 3.5 or more cm. wide, very scabrous above with decidedly bulbous-based hairs, and the spreading-hirsute hairs on the branches, branchlets, peduncles, bractlets, and calyx also being bulbous-based and interspersed in the inflorescence with resinous granules.

The type was collected by P. Krook [Fenther 1765] along the Tsitas River, Griqualand East, Union of South Africa, on January 22, 1895, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

PAEPALANTHUS CARDONAE Moldenke, sp. nov.

Herba nana; caulis erectis conspicuis dense foliosis longe pilosis; foliis graminoides chartaceis acutis vel subacutis utrinque glabris patentibus vel recurvatis; vaginis gracilibus arctiuscule adpressis densiuscule pilosis oblique fissis, lamina ad basin ciliata, ad apicem saepe recurvata; pedunculis gracillimis 2-angulatis microscopicè puberulis vel subglabratiss; capitulis hemisphaericis albidis.

Dwarf herb; stems to 4.5 cm. long, erect, densely leafy, long-pilose; leaves closely imbricate at the base, grass-like, 2--3 cm. long, 2--2.5 mm. wide at the mid-point, chartaceous, acute or subacute at apex, glabrous on both surfaces, wide-spreading or the lowest ones slightly recurved; sheaths slender, rather closely appressed, 1--1.5 cm. long, rather densely pilosulous, obliquely split at the apex, the blade ciliate at the base, the apex often recurved; peduncles very slender, 4--6 cm. long, microscopically puberulous or subglabrate, 2-angled; heads hemispheric, about 5 mm. wide, whitish; involucrel bractlets ovate to subrotund, about 1.8 mm. long and wide, rounded and apiculate at the apex, dark-brown throughout, glabrate throughout or very obscurely pilosulous at the apex; receptacle long-pilose; receptacular bractlets oblong-obovate or oblong, brownish or buff, 1.3--2 mm. long, 0.8--1 mm. wide, rounded or subtruncate at apex and there densely white-barbellate; staminate florets: sepals 3, separate, dark-brown on the upper half, gray below, oblanceolate, about 1.3 mm. long and 0.4 mm. wide, very densely white-barbellate at the subacute apex; petals 3, hyaline or light-stramineous, united into a slender tube about 1.3 mm. long, the tips free and triangular-acute; pistillate florets: sepals 3, separate, buff, spatulate, about 1 mm. long and 0.4 mm. wide, rounded at the apex, densely long-pilose on the back and very densely white-barbellate at the apex; petals 3, separate, buff, narrow-oblong or linear, about 0.8 mm. long and 0.4 mm. wide, obtuse or subacute at the apex, long-pilose on the back and margins with irregular wide-spreading hairs about as long as the petal; pistil very small; style-appendages

apparently inserted at the same level as the tiny stigmas.

The type of this species was collected by Felix Cardona (no. 2281) in sandy places in Cerro Acopan, altitude 2000 m., Caroní, Bolívar, Venezuela, in October, 1947, and is deposited in the United States National Herbarium at Washington.

PAEPALANTHUS CURURENSIS Moldenke, sp. nov.

Herba parva; caulibus gracilibus elongatis glabris foliosis; foliis membranaceis patentibus non imbricatis anguste lanceolatis vel lingulatis sensim angustatis utrinque glabratibus subtus prominente 4-costatis non fenestratis non vaginatis non scarioso-marginatis; pedunculis rectis gracillimis 3-costatis parce tortuosis glabris stramineis vel fuscis; capitulis hemisphaericis brunnescentibus.

Small herb; stem slender, elongate, to about 14 cm. long, glabrous, uniformly leafy throughout; leaves membranous, spreading at right angles from the stem, not at all imbricate, narrowly lanceolate or lingulate, not at all sheathing or scarious-margined at the base, of uniform texture throughout, gradually narrowed to the acute apex, about 4 mm. long and 0.5 mm. wide, glabrous on both surfaces, not fenestrate, prominently 4-ribbed beneath, the 2 central ribs somewhat larger than the 2 peripheral ones; inflorescence terminal; peduncles about 14 per plant, uniform, erect, very slender, 3.5--4.5 cm. long, 3-costate, slightly twisted, glabrous, stramineous or brownish; heads hemispheric, about 3 mm. broad, brownish; involucre bractlets few, brownish, broadly obovate, about 1.3 mm. long and wide, regularly rounded from the widest part to the apex, subcuneate from the widest part to the base, glabrous; receptacle glabrous; receptacular bractlets stipitate, brownish, the stipe about 0.5 mm. long and 0.2 mm. broad, the terminal blade broadly triangular, 1--1.4 mm. wide and 0.5 mm. high, the projecting sides involute around the flower, glabrous except for the very finely barbellate apex; staminate florets: sepals 3, separate, spatulate, pale-stramineous, about 0.8 mm. long and 0.3 mm. wide, rounded at the apex, very finely and minutely barbellate at the apex on the back, otherwise glabrous; petals 3, united into a pale-stramineous tube about 0.7 mm. long, free and short-lingulate at the apex; stamens 3, slightly surpassing the tube; anthers tiny, yellow; pistillate florets: sepals 3, separate, obovate, brownish, about 1.2 mm. long and 0.4 mm. wide, acute at the apex, very finely and minutely barbellate on the back at the apex, otherwise glabrate; petals 3, separate, scale-like, suborbicular, about 0.4 mm. long and wide, acute at the apex, glabrous, closely appressed to the ovary; ovary 3-celled, 3-sulcate, 3-ovulate, oblong and about 0.8 mm. long and 0.5 mm. wide when mature, glabrous.

The type of this remarkable species was collected in 5--10

cm. of water on the flooded campo adjacent to the banks of Rio Cururú at Porto da Missão Velha, Pará, Brazil, on April 25, 1942, by H. Sioli [Herb. Inat. Agron. do Norte 29159], and is deposited in the Britton Herbarium at the New York Botanical Garden. The insertion of the leaves on the stems and the shape of the receptacular bractlets, along with the scale-like petals in the platillate florets, are remarkable features of this species.

POLIANTHES TUBEROSA f. *PLENA* Moldenke, f. nov.

Haec forma a forma typica speciei floribus plenis recedit.

This form differs from the typical form of the species in its "doubled" flowers.

The type was collected by H. N. Moldenke (no. 7338) from cultivated material at Watchung, Somerset County, New Jersey, on September 19, 1932, and is deposited in the Britton Herbarium at the New York Botanical Garden.

SYNGONANTHUS ACOPANENSIS Moldenke, sp. nov.

Herba; caulibus abbreviatis dense lanatis; foliis coriaceis circinato-recurvatis rosulatis graminoides obtusis utrinque glabris multicoctatis; vaginis laxis glabris tortulosis multicoctatis oblique fissis saepe profunde laciniato-lobatis; pedunculis gracillimis solitariis 3-costatis, in statu juventute densiuscule adpresso-pilosis (pilis longis albidis), in statu aenectute obacure pilosis vel subglabris.

Herb; stems abbreviated, densely matted-woolly; leaves coriaceous, circinate recurved, uniformly bright-green on both surfaces, rosulate, grass-like, about 8 cm. long, quite uniformly 2 mm. in diameter throughout, blunt at apex, glabrous on both surfaces, many-ribbed; sheath loose, 4--7 cm. long, obliquely split and often deeply laciniate-lobed at apex, glabrous, somewhat twisted, many-ribbed; peduncles very slender, mostly one per plant, to 30 cm. long, 3-angled, rather densely appressed-pilose with long whitish hairs when young, less so or subglabrous in age or obscurely pilose only in the sulcations; heads hemispheric, 1--1.4 cm. wide; involueral bractlets numerous, dark-brown or blackish (the inner ones dark only on their upper exposed half), oblong, about 5 mm. long, 0.8--1 mm. wide, attenuate-acute at the apex, scarious-tipped, apparently ciliate-margined and pilose-barbellate at apex when young, completely glabrous in age; receptacle densely white-pilose or grayish; receptacular bractlets oblong, subhyaline or grayish, about 5 mm. long and 1 mm. wide, attenuate-acute at apex, densely barbellate-pilose at and just below the apex; staminate florets: sepals 3, separate, whitish except for 2 large vertically elongate black spots at the middle, narrow-elliptic, about 3 mm. long and 0.7 mm. wide, attenuate at the apex and densely barbellate there on the back; petals united into a hyaline gla-

brous tube about 3 mm. long, the uppermost 0.5 mm. free and triangular-acute, erect; stamens 3, equalling the corolla-tube; anthers yellow; pistillate florets: sepals 3, separate, hyaline, with 2 small vertically elongate black spots at about $2/3$ the height, oblong, about 4 mm. long and 1 mm. wide, attenuate-acute at the apex, somewhat navicular, with a heavier midrib, appressed-pilose above the middle and slightly barbellate at the apex; petals united into a hyaline tube about 4 mm. long and densely appressed long-pilose on the outside; style very short, glabrous, the appendages about 1.7 mm. long, inserted at about the same level as the 3 short stigmas; ovary large, 3-celled, 3-sulcate, 3-ovulate.

The type of this distinct species was collected by Felix Cardona (no. 2280) in shady places among sandstone rocks, Cerro Acopán, altitude 1900 m., Caroní, Bolívar, Venezuela, in October, 1947, and is deposited in the United States National Herbarium at Washington.

SYNGONANTHUS AKURIMENSIS var. *AMAZONICUS* Moldenke, var. nov.

Haec varietas a forma typica speciei differt foliis 2--2.5 cm. longis, usque ad 1.2 mm. latis, subtus valde prominente multicoctatis, pedunculis usque ad 22, 14--20 cm. longis, et vaginis usque ad 2.4 cm. longis et dense patento-pubescentibus.

This variety differs from the typical form of the species in its leaves being 2--2.5 cm. long, to 1.2 mm. wide, and very prominently many-costate beneath; peduncles to 22 per plant, 14--20 cm. long; sheaths to 2.4 cm. long and densely spreading-pubescent like the leaves.

The type was collected by Ricardo de Lemos Fróes (no. 22433) in sandy soil along the bank of the river at Temendauhy on the Rio Negro, Amazonas, Brazil, on June 30, 1947, and is deposited in the Britton Herbarium at the New York Botanical Garden.

SYNGONANTHUS AMAZONICUS Moldenke, sp. nov.

Herba nana; caulibus valde abbreviatis; foliis rosulatis linearibus acutis utrinque glabris subtus obscure striatis non conspicue fenestratis; pedunculis solitariis 2-costatis tortuosis glabris; capitulis obconicis vel hemisphaericis albidis vel stramineis.

Dwarf herb; stems greatly abbreviated; leaves rosulate, linear, 1--1.5 cm. long, about 0.5 mm. wide, acute at the apex, glabrous on both surfaces, not plainly fenestrate, obscurely striate beneath; peduncle 1 per plant, 2--2.5 cm. long, 2-costate, slightly twisted, glabrous; heads obconic or hemispheric, whitish or stramineous; involucrel bractlets pale-stramineous, chaffy, lanceolate, 2--2.5 mm. long, 0.5--0.7 mm. wide, acute at the apex, glabrous on both surfaces, shiny; receptacle smooth; receptacular bractlets subhyaline, firm, oblong-oblancheolate, about 2.5 mm. long, slightly navicular, a-

cute at the apex, glabrous; florets apparently all hermaphroditic; sepals 2, separate, hyaline, firm-textured, oblong-lanceolate, slightly navicular, 1.5--2 mm. long, about 0.5 mm. wide, attenuate-acute at the apex, glabrous on both surfaces; petals 2, hyaline, about 1.5 mm. long, connate at the middle, free at apex and base, oblanceolate, glabrous; stamens 2; pistil 1--2 mm. long; ovary 2-celled, 2-sulcate, 2-ovulate, about 0.8 mm. long and brownish when mature.

The type of this curious species was collected by J. Murca Fries (no. 727) in rocky places at the foot of the mountains, Rio Iassana, Amazonas, Brazil, on October 24, 1947, and is deposited in the Britton Herbarium at the New York Botanical Garden.

SYNGONANTHUS BLACKII Moldenke, sp. nov.

Herba nana; caulibus ut videtur elongatis longe pilosis uniforme foliosis; foliis tenuiter membranaceis graminoides utrinque parce irregulariterque longe pilosis vel in statu senectute glabrescentibus, non fenestratis non prominente costatis; inflorescentiis terminalibus; pedunculis numerosis filiformibus 2-costatis subtortulosis obscure pulverulento-puberulis vel glabrescentibus; vaginis cylindricis arcte adpressis irregulariter pilosis oblique fissis; capitulis subglobosis griseis densissime pilosis.

Dwarf herb; stems apparently elongated, long-pilose, uniformly covered with leaves; leaves thin-membranous, grass-like, 1.5--2 cm. long, about 1 mm. wide, sparsely and very irregularly long-pilose on both surfaces or glabrescent in age, not fenestrate nor prominently costate; inflorescence terminal; peduncles 30 or more per plant, filiform, 2-costate, very obscurely pulverulent-puberulent or glabrescent, very slightly twisted, 5--6 cm. long; sheaths cylindric, about 1 cm. long, closely appressed to the peduncle, irregularly pilose, obliquely split at the apex, the blade erect, attenuate, appressed; heads subglobose, gray, extremely densely pilose, about 4 mm. in diameter; involucrel bractlets rather few, hyaline or subhyaline, lanceolate, about 2 mm. long and 0.5 mm. wide, acute at the apex, glabrous on both surfaces; receptacle very densely long-pilose with white or gray hairs; receptacular bractlets numerous, hyaline, oblanceolate, about 1.6 mm. long and 0.4 mm. wide, acute at the apex, rather densely long-pilose on both surfaces above the middle; pistillate florets: sepals 3, separate, hyaline, oblanceolate, about 1.7 mm. long and 0.4 mm. wide, obtuse or subacute at the apex, glabrous on both surfaces; petals 3, hyaline, connate at the middle, free at base and apex, lanceolate, about 0.8 mm. long and 0.4 mm. wide, densely long-pilose at the apex with white erect hairs; pistil about 1.3 mm. long, glabrous; style-branches 3, about 0.4 mm. long, inserted at the same level as the stigmas which are only

half as long; staminate florets: sepals 3, separate, hyaline, oblong-oblancheolate, about 2 mm. long and 0.5 mm. wide, densely long-pilose on the back above the middle; petals 3, hyaline, united into a slender tube about 1 mm. long, the free terminal tips also about 1 mm. long, pilose at the apex; stamens 3.

The type of this species was collected by G. A. Black (no. 47-1839) -- in whose honor it is named -- in a savannah at Belterra on the shores of Rio Tapajos, Pará, Brazil, on October 27, 1947, and is deposited in the Britton Herbarium at the New York Botanical Garden.

VERBENA GLANDULIFERA Moldenke, sp. nov.

Herba procumbens; caulibus ramisque gracilibus obtuse tetragonis patento-pubescentibus vel hirtellis, pilis brevioribus glanduliferis; petioli marginatis; laminis chartaceis ovatis 3-lobatis vel 3-partitis, lobis lobulatis vel obtuse incisis revolutis acuminato-attenuatis supra strigosis subtus irregulariter patento-pubescentibus, pilis brevioribus glanduliferis.

Procumbent herb; stems and branches rather slender, obtusely tetragonal, spreading-pubescent or hirtellous with hair of various lengths, the shorter hair glanduliferous; nodes annulate; principal internodes 1--1.5 cm. long or more abbreviated; leaves numerous, decussate-opposite; petioles 3--8 mm. long, margined; blades chartaceous, rather uniformly gray-green on both surfaces, ovate, 1--1.5 cm. long, 7--12 mm. wide, 3-lobed or 3-parted, each lobe again lobed or bluntly incised, revolute-margined, acuminate-attenuate, strigose above, irregularly spreading-pubescent beneath, the shorter hairs glanduliferous, acuminate-attenuate into the petiole at base; midrib very slender, deeply impressed above, very prominent beneath; secondaries and tertiaries very slender, deeply impressed above, very prominent beneath; inflorescence terminal, subcapitate at first, elongating later to about 4 cm.; peduncles 1--2.5 cm. long, spreading-pubescent or hirtellous with hair of various lengths, the shorter hair gland-tipped; bractlets lanceolate, about 5 mm. long, attenuate at apex, puberulent on the back, long-ciliate along the margins; calyx tubular, about 6 mm. long, irregularly pubescent with gland-tipped hairs, 5-costate, the rim 5-apiculate; corolla small, violet, its tube 8--9 mm. long, very minutely puberulous outside or subglabrate, its limb 5 mm. wide.

The type of this species was collected by Nélida S. Troncoso (no. 292) at Ascochinga, altitude 700 m., Córdoba, Argentina, on October 26, 1936, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species is also known from Catamarca.

VERBENA ORIGENES var. *SEMPER* Moldenke, var. nov.

Haec varietas a forma typica speciei foliis late ovatis 3-

partitis ca. 3 cm. longis et 2.5 cm. latis, lobis profunde lobulatis utrinque dense patentibus hirsutulis, lobulis rotundato-incisis revolutis-marginatis differt.

This variety differs from the typical form of the species in having broadly ovate 3-parted leaves about 3 cm. long and 2.5 cm. wide, each division deeply lobed with rounded incised lobes, densely spreading-hirsutulous on both surfaces, the margins conspicuously revolute.

The type was collected by J. Semper -- in whose honor it is named -- at Quebrada de las Vacas, altitude 2400 m., dept. Las Heras, Mendoza, Argentina, between March 2 and 20, 1938, and is no. 4937 in the Herbario Ruiz Leal, the type deposited in the Britton Herbarium at the New York Botanical Garden. The leaves are very similar to those of V. crithmifolia Gill. & Hook., but the inflorescence is that of V. origenes R. A. Phil. of Chile.

VERBENA TESSMANNII Moldenke, sp. nov.

Herba; caulibus ramisque argute tetragonis saepe submarginatis densiuscule patento-pubescentibus vel hirtellis; petioliis densiuscule hirtellis; laminis firme chartaceis lanceolatis acutis, ad basin acuminatis, irregulariter crasso-dentatis, supra scaberrimis adpresso-albo-strigosis, subtus irregulariter densiusculeque brevipubescentibus.

Herb; stems and branches elongate, sharply tetragonal, often slightly margined, rather densely spreading-pubescent or hirtellous, the hairs standing at right angles to the surface of the stem or branch; principal internodes 5--8 cm. long; nodes annulate; leaves decussate-opposite; petioles slender, 4--6 mm. long, rather densely hirtellous; blades firmly chartaceous, rather uniformly bright-green on both surfaces or somewhat lighter beneath, lanceolate, 2--4 cm. long, 7--15 mm. wide, acute at apex, acuminate at base, irregularly and coarsely toothed, the lowest teeth often lobe-like, very rough above with long closely appressed white strigose hairs which are bulbous-based, irregularly and rather densely short-pubescent beneath with the pubescence densest and most conspicuous on the larger venation; midrib very slender, impressed above, prominent beneath; secondaries very slender, about 4 per side, impressed above, prominulous beneath; tertiaries rather few and subimpressed above, more numerous and subprominulous beneath; inflorescence terminal, spicate; peduncle slender, scutely tetragonal, spreading-hirtellous like the branches, 1.7--5 cm. long; spikes elongating to 4.5 cm. in fruit, densely many-flowered, the calyxes closely imbricate; bractlets lanceolate, about 6 mm. long, 1 mm. wide, attenuate-subulate at the apex, long-ciliate on the margins (cilia white and antrorse), puberulent on the back; calyx tubular, about 13 mm. long, 5-costate, yellow-green with gray-carmines veins, rather irregularly short-pubescent or puberulent with whitish hairs, marked with scat-

tered black capitate glands, the rim 4-toothed, the teeth about 2 mm. long, narrow-lanceolate, subulate-tipped, widely divergent and often recurved during anthesis and fruiting; corolla lilac, its slender tube to 19 mm. long, irregularly pulverulent outside, the limb about 8 mm. wide.

The type of this species was collected by Günter Tessmann -- in whose honor it is named -- in clear campos at the edge of woods between shrubs and tall herbs at Fazenda Lagoa Dourada, near Vila Velha, altitude 830 m., 21 km. southeast of Ponta Grossa, Paraná, Brazil, on February 17, 1948, and is deposited in the Britton Herbarium at the New York Botanical Garden.

ADDITIONAL NOTES ON THE GENUS AEGIPHILA. X

Harold N. Moldenke

AEGIPHILA SELLOWIANA Cham.

The species grows commonly in thickets, at edges of woods, and in river valleys. It has been collected at an altitude of 700 m.

Additional citations: BRAZIL: Goyaz: Pohl & Schott 936/4925 (F--869915). Minas Geraes: P. Clausen s.n. [Herb. Rio de Jan. 32229] (Ja); Heringer s.n. [Herb. Est. Exp. de Café 99; Herb. Dept. Bot. Est. S. Paulo 44981] (N); Mello Barreto 4012 (F--933075), 8723 (F--1009597); Mexia 4203 (F--877945, Gg--286132), 4500 (F--871875, Gg--285614), 5396 (F--877009, Gg--336133). Paraná: Dusén 2532 [Herb. Rio de Jan. 32265] (Ja), 15855 (F--668477), 16162 (Ca--501692), s.n. [Ponta Grossa, 10.12.1903] (Go); G. Jönsson 474a [Herb. Mus. Parana. 633] (Mp). Rio de Janeiro: Sellow s.n. [flowers] (F--976820--cotype), s.n. [fruit] (F--642157--photo of cotype). Rio Grande do Sul: Eugenio Leite 276 (N). Santa Catharina: Rambo 31530 (N). São Paulo: Cirino s.n. [Herb. Inst. Agron. Est. S. Paulo 3152; Herb. Dept. Bot. Est. S. Paulo 41086] (Sp); Heiner 348 (S); Mendes s.n. [Herb. Inst. Agron. Est. S. Paulo 4727; Herb. Dept. Bot. Est. S. Paulo 44310] (Sp); Pickel 4286 [Herb. Dept. Bot. Est. S. Paulo 39166] (Sp), s.n. [Herv. Serv. Florest. Est. S. Paulo 961] (W--1564388); A. P. Viégas s.n. [Herb. Inst. Agron. Est. S. Paulo 3816; Herb. Dept. Bot. Est. S. Paulo 42006] (Sp). State undetermined: Herb. Rio de Jan. 32251 (Ja). CULTIVATED: Brazil: São Paulo: F. C. Hoehne, pl. viv. 192 [Herb. Inst. Biol. 28666] (F--895338, F--895349).

AEGIPHILA SESSILIFLORA Moldenke

The species is described as a large tree, 15 m. tall, with